ABSTRACT OF THE DISCLOSURE

In one aspect of the present invention, an apparatus for converting a virtual address to a physical address is provided. The apparatus comprises a comparator, a first mechanism, and a second mechanism. The comparator is adapted to receive the virtual address and deliver a first signal indicating that the virtual address is outside a first preselected range, and a second signal indicating that the virtual address is within the first preselected range. The first mechanism is adapted to generate a first physical address from the virtual address in response to receiving the first signal, and the second mechanism is adapted to generate a second physical address from the virtual address in response to receiving the second signal.